

Project Design Phase-I
Proposed Solution Template

Date	23 October 2023
Team ID	Team-592312
Project Name	Car Purchase Prediction Using ML

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Potential buyers are not guided properly in making decisions on their car purchases. They tend to take loans far off their income to purchase cars and have issues with money management in future. Car companies meanwhile manufacture components without knowledge of future market which lead to wastage of resources. They also do not have insights on the tailored market, lack strategies and do not understand customer requirements.
2.	Idea / Solution description	Develop an automated car prediction system using data preprocessing in Machine Learning to predict car purchases based on customer data. The model assists potential buyers by estimating their likelihood to make a purchase, guiding decision-making. Automotive industry is given insights for tailored marketing strategies. It also enhances customer experiences by facilitating informed choices and dealership targeting. users input their demographics and receive precise purchase likelihoods which also helps in resource management.
3.	Novelty / Uniqueness	Machine learning models uses historical purchases and provide high efficiency predictions of future purchases based on customer data and market data.
4.	Social Impact / Customer Satisfaction	By using data preprocessing car prediction model, we provide customers better guidance on proper car purchases based on their income. We also predict the upcoming possible car purchases for the automobile industries to manufacture appropriate components and manage resources. Guidance is also offered to the automobile companies based on customers experience. This helps in resource management of the company, relevancy of the company in

		the market and also income management for the customer.
5.	Business Model (Revenue Model)	The core business revolves around the development and licensing of car prediction model. The revenue stream encompasses various aspects including resource optimisation, user awareness, automobile sales, maintenance and services, customer purchases, production capital. The overarching business strategy places a strong emphasis on sustainability and making a positive social impact.
6.	Scalability of the Solution	Car prediction data preprocessing system can be integrated with existing technology to give a user defined experience and guidance on purchases of automobiles. The needs of the customer is also viewed alongside current market which assures a balances on customer requirement and relevancy of the company in market. This can be used widespread by many companies as the data keeps updating increasing the accuracy of future predictions and hence the model can always be on demanded use.